TOSHIBA

DVD PLAYER

OWNER'S MANUAL

MODEL : SD-3900

Before connecting, operating or adjusting this product, please read this instruction booklet carefully and completely.

Safety Precautions

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR ÉVITER LES CHOC ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

WARNING: Do not install this equipment in a confined space such as a bookcase or similar unit.

CLASS 1 LASER PRODUCT
KLASSE 1 LASER PRODUKT
LUOKAN 1 LASER LAITE
KLASS 1 LASER APPARAT
CLASSE 1 PRODUIT LASER

CAUTION:

This Digital Video Disc Player employs a Laser System.

To ensure proper use of this product, please read this owner's manual carefully and retain for future reference, should the unit require maintenance, contact an authorized service location-see service procedure.

Use of controls, adjustments or the performance of procedures other than those specified herein may result in hazardous radiation exposure.

To prevent direct exposure to laser beam, do not try to open the enclosure. Visible laser radiation when open. DO NOT STARE INTO BEAM.

CAUTION: The apparatus shall not be exposed to water, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

FCC WARNING: This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

REGULATORY INFORMATION: FCC Part 15

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the product is operated in a residential installation. This product generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the product off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the product and receiver.
- Connect the product into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Notes on copyrights:

It is forbidden by law to copy, broadcast, show, broadcast via cable, play in public, or rent copyright material without permission.

This product is equipped with copy protection measures developed by Macrovision. Copy protection signals are recorded on some discs. When recording these discs on a VCR, picture noise will appear during playback.

This product incorporates copyright protection technology that is protected by certain U.S. patent claims and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

SERIAL NUMBER: The serial number is found on the back of this unit. This number is unique to this unit and not available to others. You should record requested information here and retain this guide as a permanent record of your purchase.

Model No. _____

Serial No. _____

IMPORTANT SAFETY INSTRUCTIONS

CAUTION: PLEASE READ AND OBSERVE ALL WARNINGS AND INSTRUCTIONS IN THIS OWNER'S MANUAL AND THOSE MARKED ON THE UNIT. RETAIN THIS BOOKLET FOR FUTURE REFERENCE.

This set has been designed and manufactured to assure personal safety. Improper use can result in electric shock or fire hazard. The safeguards incorporated in this unit will protect you if you observe the following procedures for installation, use, and servicing.

This unit does not contain any parts that can be repaired by the user.

DO NOT REMOVE THE CABINET COVER, OR YOU MAY BE EXPOSED TO DANGEROUS VOLTAGE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.

1. **Read These Instructions**
   All safety and operating instructions should be read before the product is operated.
2. **Follow All Instructions**
   All operating and use instructions should be followed.
3. **Keep These Instructions**
   The safety and operating instructions should be retained for future reference.
4. **Heed All Warnings**
   All warnings on the product and in the operating instructions should be adhered to.
5. **Power Sources**
   This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply in your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.
6. **Grounding or Polarization**
   Do not defeat the safety purpose of the polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
7. **Ventilation**
   Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
8. **Heat**
   Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. **Water and Moisture**
   Do not use this apparatus near water. For example: near a bath tub, wash bowl, kitchen sink, Laundry tub, in a wet basement; or near a swimming pool.
10. **Cleaning**
    Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Clean only with dry cloth.
11. **Power-Cord Protection**
    Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
12. **Overloading**
    Do not overload wall outlets, extension cords, or integral convenience receptacles, this can result in a risk of fire or electric shock.
13. **Lightning**
    Unplug this apparatus apparatus during lightning storms or when unused for long periods of time. This will prevent damage to the product due to lightning and power-line surges.
14. **Object and Liquid Entry**
    Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
15. **Attachments**
    Only use attachments/accessories specified by the manufacturer.
16. **Accessories**
    Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

PORTABLE CART WARNING

17. **Disc Tray**
    Keep your fingers well clear of the disc tray as it is closing. It can cause personal injury.
18. **Burden**
    Do not place a heavy object on or step on the product. The object may fall, causing serious personal injury and serious damage to the product.
19. **Connecting**
    When you connect the product to other equipment, turn off the power and unplug all of the equipment from the wall outlet. Failure to do so may cause an electric shock and serious personal injury. Read the owner's manual of the other equipment carefully and follow the instructions when making any connections.
20. **Sound Volume**
    Reduce the volume to the minimum level before you turn on the product. Otherwise, sudden high volume sound may cause hearing or speaker damage.
21. **Sound Distortion**
    Do not allow the product to output distorted sound for a longtime. It may cause speaker overheating and fire.
22. **Earphone**
    When you use the earphone, keep the volume at a moderate level. If you use the earphone continuously with high volume sound, it may cause hearing damage.
23. **Laser Beam**
    Do not look into the opening of the disc tray or ventilation opening of the product to see the source of the laser beam. It may cause sight damage.
24. **Disc**
    Do not use a cracked, deformed, or repaired disc. These discs are easily broken and may cause serious personal injury and product malfunction.
25. **Damage Requiring Service**
    Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normal, or has been dropped.
26. **Servicing**
    Do not attempt to service this product yourself as opening or removing the cover may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
27. **Replacement parts**
    When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
28. **Safety Check**
    Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

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About the symbols for instructions

⚠ Indicates hazards likely to cause harm to the unit itself or other material damage.

Indicates special operating features of this unit.

Indicates tips and hints for making the task easier.

Playable Discs

DVD VIDEO	DVD (8 cm / 12 cm disc)
COMPACT disc DIGITAL VIDEO	Video CD (VCD) (8 cm / 12 cm disc)
COMPACT disc DIGITAL AUDIO	Audio CD (8 cm / 12 cm disc)

In addition, this unit can play a DVD-R, and CD-R or CD-RW that contains audio titles, MP3, WMA or JPEG files.

Notes

– Depending on the conditions of the recording equipment or the CD-R/RW disc itself, some CD-R/RW discs cannot be played on the unit.
– Do not attach any seal or label to either side (the labeled side or the recorded side) of a disc.
– Do not use irregularly shaped CDs (e.g., heart-shaped or octagonal). It may result in malfunctions.
– Because of problems and errors that can occur during the creation of DVD software and/or the manufacture of DVD discs, Toshiba America Consumer Products, Inc., Toshiba Hawaii, Inc. and Toshiba of Canada, Ltd. cannot guarantee that this player will play every feature of every DVD bearing the DVD logo. As one of the creators of DVD technology, Toshiba DVD players are manufactured to the highest standards of quality and, as a result, such incompatibilities are very rare. If you happen to experience and difficulty playing a DVD on a Toshiba DVD player, please feel free to call our Contact listed in “How to Obtain Warranty Services” on page 28.

Notes on DVDs and Video CDs

Some playback operations of DVDs and Video CDs may be intentionally fixed by software manufacturers. As this unit plays DVDs and Video CDs according to disc content designed by the software manufacturer, some playback features of the unit may not be available or other functions may be added.
Refer also to the instructions supplied with the DVDs and Video CDs. Some DVDs made for business purposes may not be played on the unit.

Regional code of the DVD player and DVDs

This DVD player is designed and manufactured for playback of region “1” encoded DVD software. The region code on the labels of some DVD discs indicates which type of player can play those discs. This unit can play only DVD discs labeled “1” or “ALL”. If you try to play any other discs, the message “Check Regional Code” will appear on the TV screen. Some DVD discs may not have a region code label even though their playback is prohibited by area limits.

Disc-related terms

Title (DVD only)

The main film content or accompanying feature content or additional feature content, or music album.
Each title is assigned a title reference number enabling you to locate it easily.

Chapter (DVD only)

Sections of a picture or a musical piece that are smaller than titles. A title is composed of one or several chapters. Each chapter is assigned a chapter number, enabling you to locate the chapter you want. Depending on the disc, chapters may not be recorded.

Track (Video CD and audio CD only)

Sections of a picture or a musical piece on a video CD or an audio CD. Each track is assigned a track number, enabling you to locate the track you want.

Scene

On a video CD with PBC (Playback control) functions, moving pictures and still pictures are divided into sections called “Scenes”. Each scene is displayed in the menu screen and assigned a scene number, enabling you to locate the scene you want.
A scene is composed of one or several tracks.

Types of video CDs

There are two types of video CDs:

Video CDs equipped with PBC (Version 2.0)

PBC (Playback control) functions allow you to interact with the system via menus, search functions, or other typical computer-like operations. Moreover, still pictures of high resolution can be played if they are included in the disc.

Video CDs not equipped with PBC (Version 1.1)

Operated in the same way as audio CDs, these discs allow playback of video pictures as well as sound, but they are not equipped with PBC.

Precautions

Handling the unit

When shipping the unit
The original shipping carton and packing materials come in handy. For maximum protection, re-pack the unit as it was originally packed at the factory.

When setting up the unit
The picture and sound of a nearby TV, VCR, or radio may be distorted during playback. In this case, position the unit away from the TV, VCR, or radio, or turn off the unit after removing the disc.

To keep the exterior surfaces clean
Do not use volatile liquids, such as insecticide spray, near the unit. Do not leave rubber or plastic products in contact with the unit for a long period of time. They will leave marks on the surface.

Cleaning the unit

To clean the cabinet
Use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth lightly moistened with a mild detergent solution. Do not use strong solvents such as alcohol, benzine, or thinner, as these might damage the surface of the unit.

To obtain a clear picture
The DVD player is a high-tech, precision device. If the optical pick-up lens and disc drive parts are dirty or worn, the picture quality will be poor.
Regular inspection and maintenance are recommended after every 1,000 hours of use. (This depends on the operating environment.)
For details, please contact your nearest dealer.

Notes on Discs

Handling discs

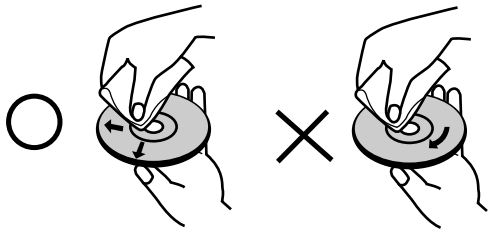
Do not touch the playback side of the disc.
Hold the disc by the edges so that fingerprints will not get on the surface.
Do not stick paper or tape on the disc.

Storing discs

After playing, store the disc in its case.
Do not expose the disc to direct sunlight or sources of heat, or leave it in a parked car exposed to direct sunlight, as there may be a considerable temperature increase inside the car.

Cleaning discs

Fingerprints and dust on the disc can cause poor picture quality and sound distortion. Before playing, clean the disc with a clean cloth. Wipe the disc from the center out.



Do not use strong solvents such as alcohol, benzine, thinner, commercially available cleaners, or anti-static spray intended for older vinyl records.

About Symbols

About the ⃠ symbol display

" ⃠ " may appear on the TV screen during operation. This icon means the function explained in this owner's manual is not available on that specific DVD video disc.

About the disc symbols for instructions

A section whose title has one of the following symbol is applicable only to the disc represented by the symbol.

- **DVD** DVD
- **VCD2.0** Video CDs with the PBC (playback control) function.
- **VCD1.1** Video CDs without the PBC (playback control) function.
- **CD** Audio CDs.
- **MP3** MP3 disc.
- **WMA** WMA disc.
- **JPEG** JPEG disc.

Front Panel and Display Window

PLAY (▶)
Starts playback.

STOP (■)
Stops playback.

PAUSE (❚❚)
Pause playback temporarily/ press repeatedly for frame-by-frame playback.

Power indicator
Lights green when the DVD player is turned on.

Forward SKIP (⏭)
Go to NEXT chapter/track.
Press and hold for two seconds for a fast forward search.

ON/STANDBY (I / ⏻)
Switches the player ON and OFF.

Reverse SKIP (⏮)
Go to the beginning of the current chapter/ track or to PREVIOUS chapter/track.
Press and hold for two seconds for a fast reverse search.

Disc Tray
Insert a disc here.

OPEN/CLOSE (⏏)
Opens or closes the disc tray.

Display window
Shows the current status of the player.

Remote Sensor
Point the DVD Player remote control here.

ANGLE active

TITLE Indicates current title number

CHP/TRK Indicates current chapter or track number

DVD DVD inserted
CD Audio CD inserted
VCD Video CD inserted
MP3 MP3 or WMA disc inserted

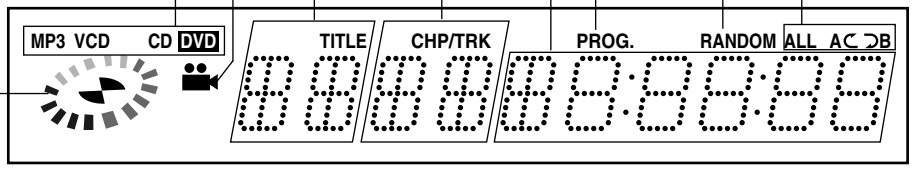
Indicates total playing time/elapsed time

PROG. Programmed playback active

RANDOM RANDOM playback active

Indicates current player function:
Playback, Pause, etc.

Indicates repeat mode



Remote Control

SETUP
Accesses or removes setup menu.

OPEN/CLOSE
Opens and closes the disc tray.

0-9 number buttons
Selects numbered items in a menu.

FL DIM
Controls the Display Window's light.

TOP MENU •
Displays the discs Title menu, if available.

MENU •
Accesses menu on a DVD disc.

RETURN •
- Removes the setup menu.
- Displays the menu of a video CD with PBC.

ZOOM •
Enlarges video image.

PLAY (▶) •
Starts playback.

REV (Reverse) (◀◀) •
Search backward.

FWD (Forward) (▶▶) •
Search forward.

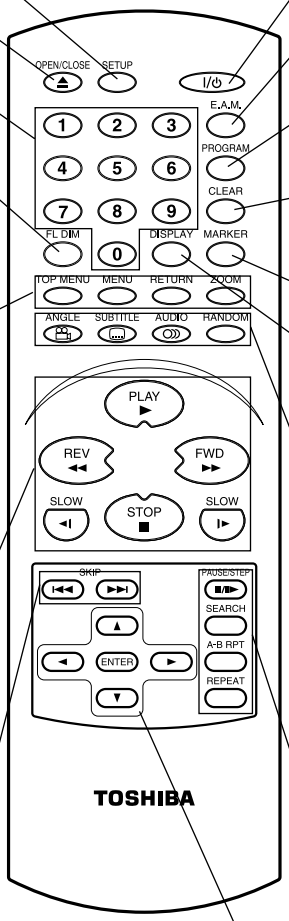
Reverse SLOW (◀❙) •
Reverse slow playback.

Forward SLOW (❙▶) •
Forward slow playback.

STOP (■) •
Stops playback.

Forward SKIP (▶▶❙) •
Advances to next chapter or track.

Reverse SKIP (❙◀◀) •
Returns to beginning of current chapter or track or go to previous chapter or track.



ON/STANDBY
Switches DVD Player ON and OFF.

E.A.M.
Selects sound mode during disc playback.

PROGRAM
Enters to the program edit mode or exits from that.

CLEAR
Removes a track number on the program list or a mark on the MARKER SEARCH menu.

MARKER
Marks any point during playback.

DISPLAY
Accesses On-Screen display.

• ANGLE
Selects a DVD camera angle if available

• SUBTITLE
Selects a subtitle language.

• AUDIO
Selects an audio language (DVD) or an audio channel (CD).

• RANDOM
Plays tracks in random order.

• PAUSE/STEP (❙❙/❙▶)
Pauses playback temporarily/ press repeatedly for frame-by-frame playback.

• SEARCH
Displays MARKER SEARCH menu.

• A-B RPT
Repeat sequence.

• REPEAT
Repeat chapter, track, title, all.

• ENTER
Confirms menu selection.

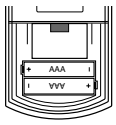
• ◀ ▶ ▲ ▼ (left/right/up/down)
Selects an item in the menu.

Remote Control Operation Range

Point the remote control at the remote sensor and press the buttons.

- **Distance:** About 23 ft (7 m) from the front of the remote sensor.
- **Angle:** About 30° in each direction of the front of the remote sensor.

Remote control battery installation



Detach the battery cover on the rear of the remote control, and insert two R03 (size AAA) batteries with ⊕ and ⊖ aligned correctly.

⚠Caution

Do not mix old and new batteries. Never mix different types of batteries (standard, alkaline, etc.).

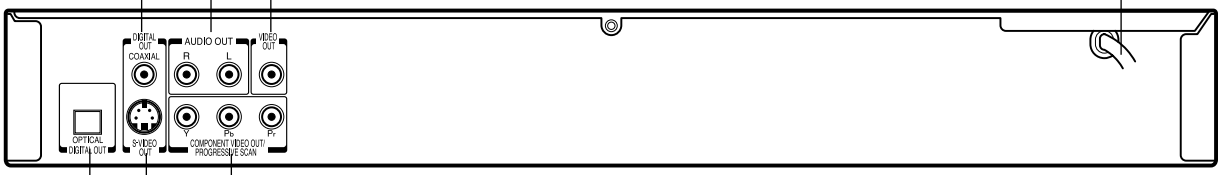
Rear Panel

COAXIAL (Digital audio out jack)
Connect to digital (coaxial) audio equipment.

AUDIO OUT (Left/Right)
Connect to an amplifier, receiver, or stereo system.

VIDEO OUT
Connect to a TV with video inputs.

AC Power Cord
Plug into the power source.



COMPONENT/PROGRESSIVE SCAN VIDEO OUT (Y Pb Pr)
Connect to a TV with Y Pb Pr inputs.

S-VIDEO OUT
Connect to a TV with S-Video inputs.

OPTICAL (Digital audio out jack)
Connect to digital (optical) audio equipment.

⚠

Do not touch the inner pins of the jacks on the rear panel. Electrostatic discharge may cause permanent damage to the unit.

Tips

- Depending on your TV and other equipment you wish to connect, there are various ways you could connect the player. Use only one of the connections described below.
- Please refer to the manuals of your TV, VCR, Stereo System or other devices as necessary to make the best connections.
- For better sound reproduction, connect the player's AUDIO OUT jacks to the audio in jacks of your amplifier, receiver, stereo or audio/video equipment. See "Connecting to Optional Equipment" on page 11.

Caution

– Make sure the DVD Player is connected directly to the TV. Tune the TV to the correct video input channel.
– Do not connect the DVD Player's AUDIO OUT jack to the phono in jack (record deck) of your audio system.
– Do not connect your DVD Player via your VCR. The DVD image could be distorted by the copy protection system.

Connecting to a TV

- Make one of the following connections, depending on the capabilities of your existing equipment.

Video connection (Good)

1 Connect the VIDEO OUT jack on the DVD Player to the video in jack on the TV using the video cable **(V)**.

2 Connect the Left and Right AUDIO OUT jacks of the DVD Player to the audio left/right in jacks on the TV **(A)** using the audio cables.

S-Video connection (Better)

1 Connect the S-VIDEO OUT jack on the DVD Player to the S-Video in jack on the TV using the S-Video cable **(S)**.

2 Connect the Left and Right AUDIO OUT jacks of the DVD Player to the audio left/right in jacks on the TV **(A)** using the audio cables.

Component Video (ColorStream®) connection (Best)

1 Connect the COMPONENT VIDEO OUT/ PROGRESSIVE SCAN jacks on the DVD Player to the corresponding in jacks on the TV using the Y Pb Pr cable **(C)**.

2 Connect the Left and Right AUDIO OUT jacks of the DVD Player to the audio left/right in jacks on the TV **(A)** using the audio cables.

Progressive Scan (ColorStream®Pro) connection

- If your television is a high-definition or "digital ready" television, you may take advantage of the DVD Player's progressive scan output for the highest video resolution possible.
- If your TV does not accept the Progressive Scan format, the picture will appear scrambled if you try Progressive Scan on the DVD Player.

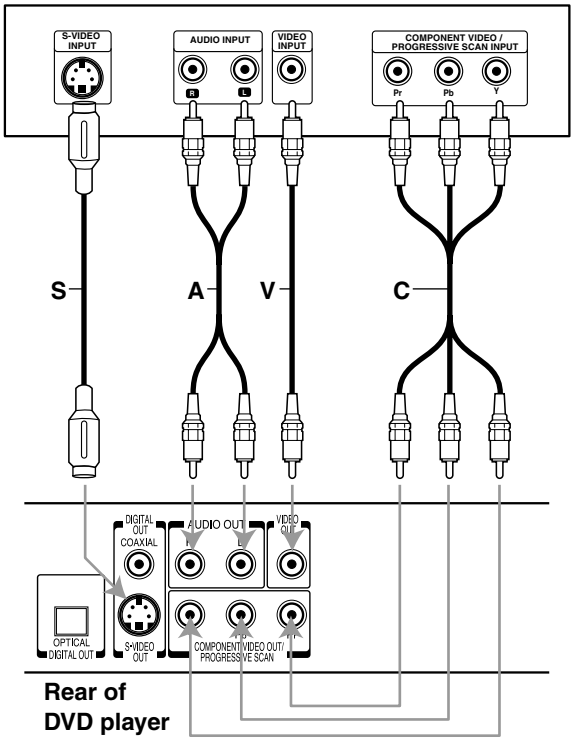
1 Connect the COMPONENT VIDEO OUT/ PROGRESSIVE SCAN jacks on the DVD Player to the corresponding in jacks on the TV using the Y Pb Pr cable **(C)**.

2 Connect the Left and Right AUDIO OUT jacks of the DVD Player to the audio left/right in jacks on the TV **(A)** using the audio cables.

Notes

– Set the Progressive to "On" on the setup menu for progressive signal, see page 13.
– Progressive scan does not work with the analog video connections (yellow VIDEO OUT jack) or S-VIDEO connection.

Rear of TV



Note

If the TV has an S-video input, connect the DVD player with the S-video cable. When using an S-video cable, do not connect the yellow video cable.

Connecting to Optional Equipment

Connecting to an amplifier equipped with two channel analog stereo or Dolby Pro Logic II/ Pro Logic

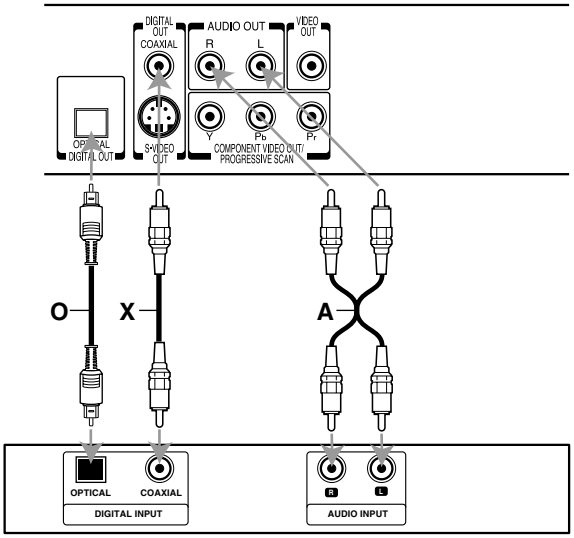
Connect the Left and Right AUDIO OUT jacks on the DVD Player to the audio left and right in jacks on your amplifier, receiver, or stereo system, using the audio cables **(A)**.

Connecting to an amplifier equipped with two channel digital stereo (PCM) or to an Audio/ Video receiver equipped with a multi-channel decoder (Dolby Digital™, MPEG 2, or DTS)

1 Connect one of the DVD Player's DIGITAL AUDIO OUT jacks (OPTICAL **O** or COAXIAL **X**) to the corresponding in jack on your amplifier. Use an optional digital (optical **O** or coaxial **X**) audio cable.

2 You will need to activate the player's digital output. (See "Digital Audio Output" on page 14).

Rear of DVD player



Amplifier (Receiver)

Digital Multi-channel sound

A digital multi-channel connection provides the best sound quality. For this you need a multi-channel Audio/Video receiver that supports one or more of the audio formats supported by your DVD Player (MPEG 2, Dolby Digital™ and DTS). Check the receiver manual and the logos on the front of the receiver.

Caution:

Due to the DTS Licensing agreement, the digital output will be in DTS digital out when DTS audio stream is selected.

Notes

– If the audio format of the digital output does not match the capabilities of your receiver, the receiver will produce a strong, distorted sound or no sound at all.
– Six Channel Digital Surround Sound via digital connection can only be obtained if your receiver is equipped with a Digital Multi-channel decoder.
– To see the audio format of the current DVD in the on-screen display, press AUDIO.
– Repeated pressing of the AUDIO button may allow you to select between various audio formats available on the disc.

Note

This player does not perform internal (2 channel) decoding of a DTS sound track. To enjoy DTS multi channel surround, you must connect this player to a DTS compatible receiver via one of this player's digital audio outputs.

General Explanation

This manual gives basic instructions for operating the DVD Player. Some DVDs require specific operation or allow only limited operation during playback. When this occurs, the symbol ⃠ appears on the TV screen, indicating that the operation is not permitted by the DVD Player or is not available on the disc.

On-Screen Display

General playback status can be displayed on the TV screen. Some items can be changed on the menu.

On-screen display operation

1 Press DISPLAY during playback.

2 Press ▲/▼ to select an item.
The selected item will be highlighted.

3 Press ◄/► to change the setting of an item.
The number buttons can be also be used for setting numbers (e.g., title number). For some functions, press ENTER to execute the setting.

Temporary Feedback Field Icons

- TITLE — Repeat Title
- CHAPT — Repeat Chapter
- TRACK — Repeat Track (non-PBC Video CDs only)
- ALL — Repeat All Tracks (non-PBC Video CDs only)
- A B — Repeat A-B
- OFF — Repeat Off
- ■■ — Resume play from this point
- ⃠ — Action prohibited or not available

Notes

- Some discs may not provide all of the features on the on-screen display example shown below.
- If no button is pressed for 10 seconds, the on-screen display disappears.

DVD

Items		Function (Press ▲/▼ to select desired item)	Selection Method
Title Number	1 /3	**Shows the current title number and total number of titles, and** skips to the desired title number.	◄ / ►, or Numbers, ENTER
Chapter Number	1 /12	**Shows the current chapter number and total number of chapters, and** skips to the desired chapter number.	◄ / ►, or Numbers, ENTER
Time search	0:20:09	**Shows the elapsed playing time, and** searches the point by the elapsed time directly.	Numbers, ENTER
Audio language and Digital Audio Output mode	1 ENG DD 5.1 CH	**Shows the current audio soundtrack language, encoding method, and channel number, and** changes the setting.	◄ / ►, or AUDIO
Subtitle language	OFF	**Shows the current subtitles language, and** changes the setting.	◄ / ►, or SUBTITLE
Angle	1 /1	**Shows the current angle number and total number of angles, and** changes the angle number.	◄ / ►, or ANGLE
Sound	NORM.	**Shows the current sound mode, and** changes the setting.	◄ / ►, or E.A.M.

VCD2.0 **VCD1.1**

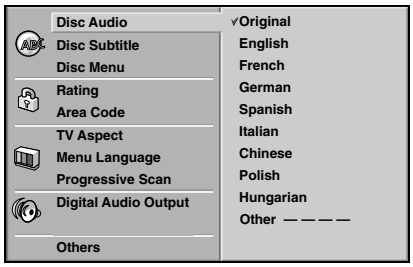
Items		Function (Press ▲/▼ to select desired item)	Selection Method
Track Number	1 /4	**Shows the current track number, total number of tracks and PBC On mode, and** skip to the desired track number.	◄ / ►, or Numbers, ENTER
Time	0:20:09	**Shows the elapsed playing time (Display only)**	–
Audio Channel	STER.	**Shows the audio channel, and** changes the audio channel.	◄ / ►, or AUDIO
Sound	NORM.	**Shows the current sound mode, and** changes the setting.	◄ / ►, or E.A.M.

Initial Settings

You can set your own Personal Preferences on the player.

Initial Settings General Operation

1 **Press SETUP.**
The setup menu appears.



2 **Press ▲/▼ to select the desired item.**
The screen will show the current setting for the selected item, as well as alternate setting(s).

3 **While the desired item is selected, press ▶, then ▲/▼ to select the desired setting.**

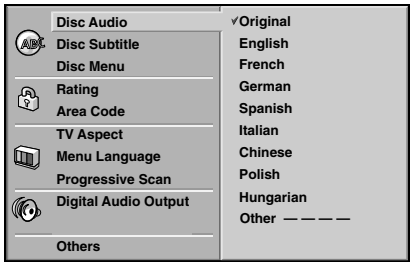
4 **Press ENTER to confirm your selection.**
Some items require additional steps.

5 **Press SETUP, RETURN, or PLAY to exit the setup menu.**

Language

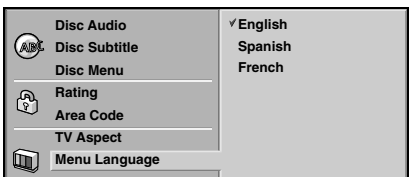
Disc Language DVD

Select a language for the disc's Menu, Audio, and Subtitle.
Original : The original language set for the disc is selected.
Other : To select another language, press number buttons to enter the corresponding 4-digit number according to the language code list on page 25. If you enter the wrong language code, press CLEAR.



Menu Language

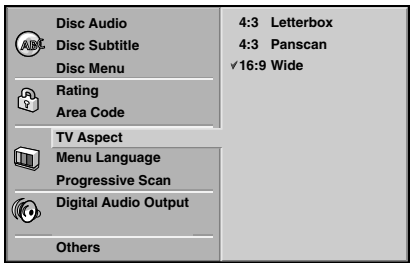
Select a language for the setup menu. This is the menu you see when you press SETUP.



Picture

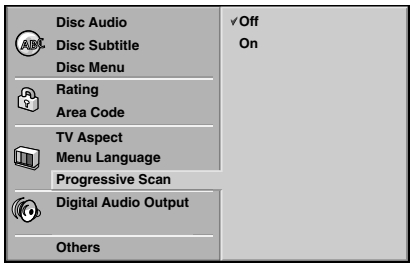
TV Aspect DVD

4:3 Letterbox: Select when a standard 4:3 TV is connected. Displays theatrical images with masking bars above and below the picture.
4:3 Panscan: Select when a conventional TV set is connected. The video material formatted in the Pan & Scan style is played back in that style (Both sides of the picture are cut off).
16:9 Wide: Select when a 16:9 wide TV is connected.



Progressive Scan DVD

Progressive Scan Video provides the highest quality pictures with less flickering.
If you are using the COMPONENT VIDEO OUT/ PROGRESSIVE SCAN jacks, but are connecting the DVD Player to a standard (analog) television, set Progressive Scan to Off.
If you are using the Component Video jacks for connection to a TV or monitor that is compatible with a progressive scan signal, set Progressive Scan to On.



⚠Caution
Once the setting for progressive scan output is entered, an image will only be visible on a progressive scan compatible TV or monitor. If you set Progressive Scan to On in error, you must reset the unit. Press STOP to stop any disc that is playing. Next, press STOP again and hold it for five seconds before releasing it. The video output will be restored to the standard setting, and a picture will once again be visible on a conventional analog TV or monitor.

Sound

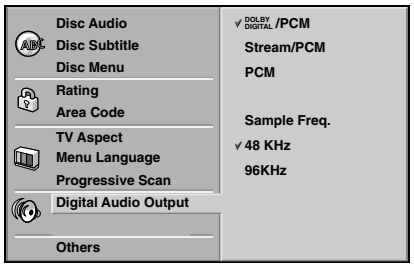
Digital Audio Output

Each DVD disc has a variety of audio output options. Set the player's Digital Audio Output according to the type of audio system you use.

DOLBY DIGITAL/PCM: Select "DOLBY DIGITAL/PCM" if you connected the DVD Player's DIGITAL OUT jack to a Dolby Digital decoder (or an amplifier or other equipment with a Dolby Digital decoder).

Stream/PCM: Select "Stream/PCM" if you connected the DVD Player's DIGITAL OUT jack to an amplifier or other equipment with a DTS decoder, Dolby Digital decoder or MPEG decoder.

PCM: Select when connected to a 2-channel digital stereo amplifier. The DVD player outputs sounds in the PCM 2ch format when you play a DVD video disc recorded on the Dolby Digital, MPEG1, or MPEG2 recording system.



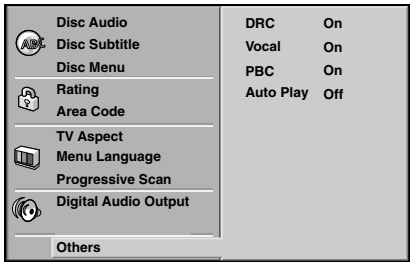
Sample Frequency

To change the Sample Frequency setting, first select the desired Digital Audio Output as indicated as above. If your receiver or amplifier is NOT capable of handling 96KHz signals, select 48KHz. When this choice is made, this unit will automatically convert any 96KHz signals to 48KHz so your system can decode them. If your receiver or amplifier is capable of handling 96KHz signals, select 96KHz. When this choice is made, this unit will pass each type of signal through without any further processing.

Others

The DRC, Vocal, PBC and Auto Play settings can be changed.

- Press ▲/▼ to select the desired item and press ENTER. The setting of the selected item is changed between On and Off.



Dynamic Range Control (DRC) DVD

With the DVD format, you can hear a program's soundtrack in the most accurate and realistic presentation possible, thanks to digital audio technology. However, you may wish to compress the dynamic range of the audio output (the difference between the loudest sounds and the quietest ones). Then, you may listen to a movie at a lower volume without losing clarity of sound. Set DRC to On for this effect.

Vocal DVD

Set Vocal to On only when a multi-channel karaoke DVD is playing. The karaoke channels on the disc will mix into normal stereo sound.

PBC VCD2.0 VCD1.1

Set Playback Control (PBC) to On or Off.
On: Video CDs with PBC are played according to the PBC.
Off: Video CDs with PBC are played the same way as Audio CDs.

Auto Play DVD

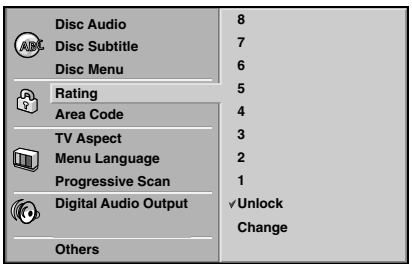
You can set up the DVD Player so a DVD disc automatically starts playing whenever the DVD is inserted. If Auto Play mode is set to On, this DVD player will search a title where playback time is longest and then play back the title automatically.
On: Auto Play function is activated.
Off: Auto Play function is not activated.

Note
The Auto Play function may not work for some DVDs.

Parental Control

Rating DVD

Movies on DVDs may contain scenes not suitable for children. Therefore, discs may contain Parental Control information that applies to the complete disc or to certain scenes on the disc. These scenes are rated from 1 to 8, and alternatively, more suitable scenes are available for selection on some discs. Ratings are country-dependent. The Parental Control feature allows you to prevent discs from being played by your children or to have certain discs played with alternative scenes.



1 **Select "Rating" on the Setup menu using the ▲/▼ buttons.**

2 **While "Rating" is selected, press ▶.**

3 **When you have not entered a password yet.**
Enter a 4-digit password using the numbered buttons to create a personal 4-digit security password. then press ENTER. Enter the 4-digit password again and press ENTER to verify.
When you have already entered a password;
Enter a 4-digit password using the numbered buttons to confirm the personal 4-digit security password, then press ENTER.

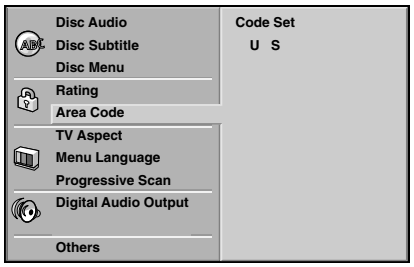
If you make a mistake before pressing ENTER, press CLEAR and enter 4-digit security password again.

4 **Select a rating from 1 to 8 using the ▲/▼ buttons.**
Level 1: DVD software for adults cannot be played back.
Level 8: All DVD software can be played back.
Unlock: *If you select Unlock, Parental Control is not active. The disc will play in full.*
Ratings 1 to 8: *Some discs contain scenes not suitable for children. If you set a rating for the player, all disc scenes with the same rating or lower will be played. Higher rated scenes will not be played unless an alternative scene is available on the disc. The alternative must have the same rating or a lower one. If no suitable alternative is found, playback will stop. You must enter the 4-digit password or change the rating level in order to play the disc.*

5 **Press ENTER to confirm your rating selection, then press SETUP to exit the menu.**

Area Code DVD

Enter the code of a country/area whose standards were used to rate the DVD video disc, referring to the list (See "Area Code List", page 26.).



1 **Select Area Code using the ▲/▼ buttons on the setup menu.**

2 **While Area Code is selected, press ▶.**

3 **Follow step 3 of "Rating" on left.**

4 **Select the first character using the ▲/▼ buttons.**

5 **Shift the cursor using ▶ button and select the second character using ▲/▼ buttons.**

6 **Press ENTER to confirm your area code selection, then press SETUP to exit the menu.**

Note
Confirmation of the 4-digit password is necessary when the code is changed (see "Changing the 4-digit code" below.).

Changing the 4-digit code

1 Follow Steps 1-2 as shown above to the left (Rating).
2 Enter the old code, then press ENTER.
3 Select Change using ▲/▼ buttons then press ENTER.
4 Enter the new 4-digit code, then press ENTER.
5 Enter exactly the same code a second time and verify by pressing ENTER.
6 Press SETUP to exit the menu.

If you forget your 4-digit code

If you forget your password, to clear the current password, follow the procedure below.

1 Press SETUP to display the setup menu.
2 Use the Number buttons to enter the 6-digit number "210499".
The 4-digit password is cleared. "P CLr" appears on the display for a moment.
3 Enter a new code as shown above to the left (Rating).

Playing a DVD and Video CD

Playback Setup DVD VCD2.0 VCD1.1

- Turn on the TV and select the video input source connected to the DVD player.
- Audio system: Turn on the audio system and select the input source connected to the DVD player.

1 **Press OPEN/CLOSE to open the disc tray.**

2 **Load your chosen disc in the tray, with the playback side down.**

3 **Press OPEN/CLOSE to close the tray.**
READING appears on the TV screen, and playback starts automatically. If playback does not start, press PLAY.
In some cases, the disc menu might appear instead.

If a menu screen is displayed

The menu screen may be displayed first after loading a DVD or Video CD which offer a menu.

DVD

Use the ◄ ► ▲ ▼ buttons to select the title/chapter you want to view, then press ENTER to start playback. Press TOP MENU or MENU to return to the menu screen.

VCD2.0

- Use the number buttons to select the track you want to view.
  Press RETURN to return to the menu screen.
- Menu setting and the exact operating procedures for using the menu may differ depending on the disc. Follow the instructions on the each menu screen. You also may set PBC to Off under setup. See page 14.

Notes

– If Parental Control is set and the disc is not within the Rating settings (not authorized), the 4-digit code must be entered and/or the disc must be authorized (see "Parental Control", on page 15).
– DVDs may have a region code.
Your player will not play discs that have a region code different from your player. The region code for this player is 1 (one).

General Features

Note

Unless stated otherwise, all operations described use the remote control. Some features may also be available on the Setup menu.

Moving to another TITLE DVD

T 1/3

When a disc has more than one title, you can move to another title as follows:

- Press DISPLAY, then press the appropriate numbered button (0-9) to select a title number.

Moving to another CHAPTER/TRACK

DVD VCD1.1 VCD2.0 C 1/12 T 1/12

When a title on a disc has more than one chapter or a disc has more than one track, you can move to another chapter/track as follows:

- Press SKIP ⏮ or ⏭ briefly during playback to select the next chapter/track or to return to the beginning of the current chapter/track.
- Press SKIP ⏮ twice in quick successions to step back to the previous chapter/track.
- To go directly to any chapter during DVD playback, press DISPLAY. Then, press ▲/▼ to select the chapter/track icon. Then, enter the chapter/track number using the numbered buttons (0-9).

Note

For two-digit numbers, press the numbered buttons (0-9) in rapid succession.

Search DVD VCD2.0 VCD1.1

1 Press REV ◄◄ or FWD ►► during playback.
The player will now go into SEARCH mode.
2 Press REV ◄◄ or FWD ►► repeatedly to select the required speed: ◄◄X2, ◄◄X4, ◄◄X16, ◄◄X100 (backward) or ►►X2, ►►X4, ►►X16, ►►X100 (forward).
With a Video CD, the Search speed changes: ◄◄X2, ◄◄X4, ◄◄X8, (backward) or ►►X2, ►►X4, ►►X8, (forward).
3 To exit SEARCH mode, press PLAY.

Still Picture and Frame-by-frame playback

DVD VCD2.0 VCD1.1

1 Press PAUSE/STEP during playback.
The player will now go into PAUSE mode.
2 You can advance the picture frame-by-frame by pressing PAUSE/STEP repeatedly on the remote control.

General Features (continued)

Slow Motion DVD VCD2.0 VCD1.1

1 Press SLOW ◀II or II▶ during playback.
The player will enter SLOW mode.
2 Use the SLOW ◀II or II▶ to select the required speed:
◀II 1/16, ◀II 1/8, ◀II 1/4 or ◀II 1/2 (backward), or
II▶ 1/16, II▶ 1/8, II▶ 1/4 or II▶ 1/2 (forward).
3 To exit slow motion mode, press PLAY.

Note
Slow motion playback in reverse is not applicable for Video CD.

Random Karaoke DVD VCD2.0 VCD1.1

1 Press RANDOM during playback or in stop mode. The unit automatically begins Random Playback and "RANDOM" appears on the display window.
2 To return to normal playback, press RANDOM until "RANDOM" disappears on the display window.

Tip
By pressing SKIP ▶▶I during Random playback, the unit selects another title (track) and resumes Random playback.

Note
- This function only works with DVD Karaoke discs and video CD without PBC.
- On a Video CD with PBC, you must set PBC to Off on the setup menu to use the Random function. See page 14.

Repeat DVD VCD2.0 VCD1.1

DVD Video Discs - Repeat Chapter/Title/Off

1 To repeat the currently playing chapter, press REPEAT.
The Repeat Chapter icon appears on the TV screen.
2 To repeat the title currently playing, press REPEAT a second time.
The Repeat Title icon appears on the TV screen.
3 To exit Repeat mode, press REPEAT a third time.
The Repeat Off icon appears on the TV screen.

Video CDs - Repeat Track/All/Off

1 To repeat the track currently playing, press REPEAT.
The Repeat Track icon appears on the TV screen.
2 To repeat the disc currently playing, press REPEAT a second time.
The Repeat All icon appears on the TV screen.
3 To exit Repeat mode, press REPEAT a third time.
The Repeat Off icon appears on the TV screen.

Note
On a Video CD with PBC, you must set PBC to Off on the setup menu to use the Repeat function. See page 14.

Repeat A-B DVD VCD2.0 VCD1.1

To repeat a sequence in a title:

1 Press A-B RPT at your desired starting point.
" A * " appears briefly on the TV screen.
2 Press A-B RPT again at your desired end point.
"A B" appears briefly on the TV screen, and the repeat sequence begins ("A⮌B" appears the display window).
3 To cancel the sequence, press A-B RPT.

Time Search DVD

The Time Search function allows you to start playing at any desired time on the disc.

1 Press DISPLAY during playback. The on-screen display appears on the screen.
The Time Search box shows the elapsed playing time of the current disc.
2 Within 10 seconds, press ▲/▼ to select the Time Search icon in the on-screen display.
The "-:--:--" appears in the Time Search box.
3 Within 10 seconds, use the number buttons to enter the required start time. Enter hours, minutes, and seconds from left to right in the box.
If you enter the wrong numbers, press CLEAR to remove the numbers you entered. Then enter the correct numbers.
4 Within 10 seconds, press ENTER to confirm the start time.
Playback starts from the selected time on the disc. If you enter an invalid time, playback will continue from the current point.

Selecting the sound enhancement

DVD VCD2.0 VCD1.1

Press E.A.M. to select the sound enhancement during playback.

NORM. : Normal sound
3D SUR: This player can produce a 3D Surround effect, which simulates multi-channel audio playback from two conventional stereo speakers, instead of the five or more speakers normally required to listen to multi-channel audio from a home theater system.
DIALOGUE: Enhances critical center channel information to make dialogue more intelligible (only when playing a DVD video disc recorded on the Dolby Digital recording system).
- To use this enhancement on audio output from the DIGITAL AUDIO OUT jack, be sure to set "Digital Audio Output" to "PCM". See page 14.

General Features (continued)

Zoom DVD VCD2.0 VCD1.1

The Zoom function allows you to enlarge the video image and to move through the enlarged image.

1 Press ZOOM during playback or still playback to activate the Zoom function.
If you press ZOOM repeatedly, the magnification level increases up to six steps.

2 Use the ◄ ►▲▼ buttons to move through the zoomed picture.

3 Press CLEAR to resume normal playback or return to the paused image.

Note

- The zoom function may not work for some DVDs.

Marker Search DVD VCD2.0 VCD1.1

You can start playback from a memorized point. Up to nine points can be memorized.
To enter a mark, follow these steps.

1 During disc playback, press MARKER when playback reaches the spot that you want to memorize.
The Marker icon will appear on the TV screen briefly.

2 Repeat step 1 to enter up to nine Marker points on a disc.

To Recall a Marked Scene

1 During disc playback, press SEARCH.
The MARKER SEARCH menu will appear on the screen.

2 Within 10 seconds, press ◄/► to select a Marker number that you want to recall.

3 Press ENTER.
Playback will start from the Marked scene.

4 To remove the MARKER SEARCH menu, press SEARCH.

To clear a Marked Scene

1 During disc playback, press SEARCH.
The MARKER SEARCH menu will appear on the screen.

2 Press ◄/► to select the Marker number that you want to erase.

3 Press CLEAR.
The Marker number will be erased from the list.

4 Repeat steps 2 and 3 to erase additional Marker numbers.

5 To remove the MARKER SEARCH menu, press SEARCH.

Special DVD Features DVD

Checking the contents of DVD Video discs: Menus

DVDs may offer menus that allow you to access special features. To use the disc menu, press MENU. Then, press the appropriate number button to select an option. Or, use the ◄ ►▲▼ buttons to highlight your selection, then press ENTER.

Title Menu DVD

1 Press TOP MENU.
If the current title has a menu, the menu will appear on the screen. Otherwise, the disc menu may appear.

2 The menu can list camera angles, spoken language and subtitle options, and chapters for the title.

3 To remove the title menu, press TOP MENU again.

Disc Menu DVD

1 Press MENU.
The disc menu is displayed.

2 To remove the disc menu, press MENU again.

Camera Angle DVD

If the disc contains scenes recorded at different camera angles, you can change to a different camera angle during playback.

- Press ANGLE repeatedly during playback to select a desired angle.
The number of the current angle appears on the display.

Changing the Audio Language

DVD

Press AUDIO repeatedly during playback to hear a different audio language or audio track.

Changing the Audio Channel

VCD2.0 VCD1.1

Press AUDIO repeatedly during playback to hear a different audio channel (STER., LEFT or RIGHT).

Subtitles DVD

Press SUBTITLE repeatedly during playback to see the different subtitle languages.

Note

If ⃠ appears, the feature is not available on the disc.

Operation with Audio CD and MP3/WMA Disc

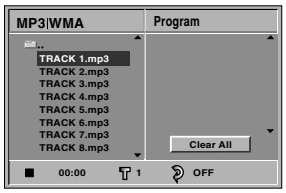
Playing an Audio CD and MP3/WMA Disc

CD **MP3** **WMA**

The DVD Player can play MP3/WMA formatted recordings on CD-ROM, CD-R or CD-RW discs.
Before playing MP3/WMA recordings, read the notes on MP3/WMA Recordings on right.

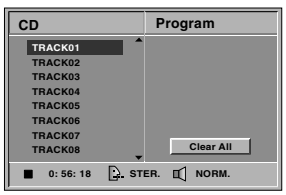
1 **Insert a disc and close the tray.**
Audio CD; Audio CD menu appears on the TV screen go to step 3.
MP3/WMA disc; The MP3/WMA-JPEG choice menu appears on the TV screen. Go to step 2

2 **Press ▲/▼ to select the MP3/WMA then press ENTER.**
The MP3/WMA menu appears on the TV screen.
Press RETURN to move to the MP3/WMA-JPEG choice menu.

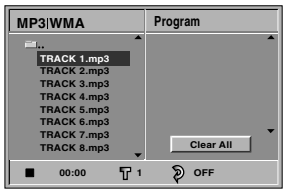


3 **Press ▲/▼ to select a folder, and ENTER.**
A list of files in the folder appears.

4 **Press ▲/▼ to select a track then press PLAY or ENTER.**
Playback starts.
During playback, the current track's elapsed playing time will appear on the display window and menu.
Playback will stop at the end of the disc.
Press TOP MENU to move to the next page.
Press MENU to move to the previous page.



Audio CD menu



MP3/WMA menu

Tips
If you are in a file list and want to return to the Folder list, use the ▲▼ to highlight and press ENTER to return to the previous menu screen.

5 **To stop playback at any other time, press STOP.**

Notes on MP3/WMA Recordings

About MP3

- An MP3 file is audio data compressed by using the MPEG1 audio layer-3 file-coding scheme. We call files that have the ".mp3" file extension "MP3 files".
- The player can not read an MP3 file that has a file extension other than ".mp3".

About WMA(Window Media Audio)

- An WMA file is a Microsoft audio compression technology.
- WMA(Windows Media Audio) offers double the audio compression of the MP3 format.

MP3/WMA Disc compatibility with this player is limited as follows:

1. Sampling Frequency / only at 44.1kHz (MP3), 22.05 - 44.1kHz (WMA)
2. Bit rate / within 32 - 320kbps (MP3), 32 - 128kbps (WMA)
3. CD-R physical format should be "ISO 9660"
4. If you record MP3/WMA files using the software which cannot create a FILE SYSTEM, for example "Direct-CD" etc., it is impossible to playback MP3/WMA files. We recommend that you use "Easy CD Creator", which creates an ISO9660 file system.
5. A single session disc requires MP3/WMA files in the first track. If there is no MP3/WMA file in the 1st track, it cannot playback MP3/WMA files. If you wish to playback MP3/WMA files, format all the data in the disc or use a new one.
6. File names should be named using 8 letters or less and must incorporate ".mp3" or ".wma" extension e.g. "********.MP3" or "********.WMA".
7. Do not use special letters such as "/ : * ? " < > " etc.
8. Total number of files on the disc should be less than 650.

This DVD player requires discs/recordings to meet certain technical standards in order to achieve optimal playback quality. Pre-recorded DVDs are automatically set to these standards. There are many different types of recordable disc formats (including CD-R containing MP3 or WMA files). That require certain pre-existing conditions (see above) to insure compatible playback.

Customers should also note that permission is required in order to download MP3/WMA files and music from the Internet. Our company has no right to grant such permission. Permission should always be sought from the copyright owner.

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Designed for Windows Media™

Pause CD MP3 WMA

1 Press PAUSE/STEP during playback.
2 To return to playback, press PLAY or press PAUSE/STEP again.

Moving to another Track CD MP3 WMA

- Press SKIP ⏮ or ⏭ briefly during playback to go to the next track or to return to the beginning of the current track.
- Press SKIP ⏮ twice briefly to step back to the previous track.
- In case of audio CD, to go directly to any track, enter the track number using the numbered buttons (0-9) during playback.

Repeat Track/All/Off CD MP3 WMA

1 To repeat the track currently playing, press REPEAT.
The Repeat icon and "TRACK" appears on the menu screen.
2 To repeat all tracks on a disc, press REPEAT a second time.
The Repeat icon and "ALL" appears on the menu screen.
3 To cancel Repeat mode, press REPEAT a third time.
The Repeat icon and "OFF" appears on the menu screen.

Search CD MP3 WMA

1 Press REV ◀◀ or FWD ▶▶ during playback.
The player will now go into SEARCH mode.
2 Press REV ◀◀ or FWD ▶▶ repeatedly to select the required speed: ◀◀X2, ◀◀X4, ◀◀X8 (backward) or ▶▶X2, ▶▶X4, ▶▶X8 (forward).
Search speed and direction are indicated on the menu screen.
3 To exit SEARCH mode, press PLAY.

Random CD MP3 WMA

1 Press RANDOM during playback or when playback is stopped.
The unit automatically begins Random Playback and RANDOM or "RAND." appears on the display window and menu screen.
2 To return to normal playback, press RANDOM repeatedly until RANDOM or "RAND." disappears on the display window and menu screen.

Repeat A-B CD

To repeat a sequence.
1 During disc playback, press A-B RPT at your desired starting point.
The Repeat icon and "A * " appears on the menu screen.
2 Press A-B RPT again at your desired end point.
The Repeat icon and "A B" appears on the menu screen, and the sequence begins to play repeatedly.
3 To exit the sequence and return to normal play, press A-B RPT again.
The Repeat icon and "OFF" appears on the menu screen.

Selecting the sound enhancement CD

This unit can produce a 3D Surround effect, which simulates multi-channel audio playback from two conventional stereo speakers, instead of the five or more speakers normally required to listen to multi-channel audio from a home theater system.
1 Press E.A.M. to select "3D SUR" during playback.
2 To turn off the 3D Surround effect, press E.A.M. again to select "NORM.".

Changing the Audio Channel CD

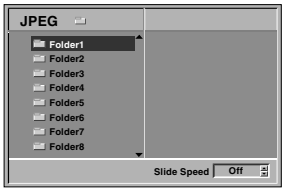
Press AUDIO repeatedly during playback to hear a different audio channel (STER., LEFT, or RIGHT).

Viewing a JPEG disc JPEG

This DVD Player can play discs with JPEG files. Before playing JPEG recordings, read the notes on JPEG Recordings on right.

1 **Insert a disc and close the tray.**
The MP3/WMA-JPEG choice menu appears on the TV screen.

2 **Press ▲/▼ to select the JPEG then press ENTER.**
The JPEG menu appears on the TV screen.

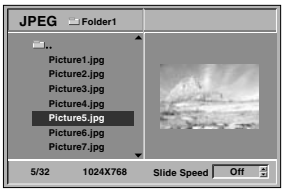


3 **Press ▲/▼ to select a folder, and ENTER.**
A list of files in the folder appears.
Press RETURN to move to the MP3/WMA-JPEG choice menu.

Tip

If you are in a file list and want to return to the Folder list, use the ▲▼ buttons on the remote to highlight " .. " and press ENTER to return to the previous menu screen.

4 **If you want to view a particular file, press ▲/▼ to highlight a file and press ENTER or PLAY.**
Viewing the file proceeding starts.
During viewing a file, press RETURN to move to the previous menu (JPEG menu).
Press TOP MENU to move to the next page.
Press MENU to move to the previous page.



Tip

There are three viewing Slide Speed options: Fast, Normal, Slow, and Off. Press ◀/▶ to highlight the Slide Speed then press ▲/▼ to select the option you want to use, and press ENTER.

5 **To stop viewing at any other time, press STOP.**
The JPEG menu appears.

Moving to another File

Press SKIP ⏮ or ⏭ once during viewing a picture to advance to the next file or to the previous file.

Still Picture

1 Press PAUSE/STEP during slide show.
The player will now go into PAUSE mode.
2 To return to the slide show, press PLAY or press PAUSE/STEP again.

To flip the picture

Press ▲/▼ during showing a picture to flip the picture horizontally or a vertically.

To rotate picture

Press ◀/▶ during showing a picture to rotate the picture clockwise or counter clockwise.

Notes on JPEG Recordings

- Depending upon the size and number of the JPEG files, it could take a long time for the DVD player to read the disc's contents. If you don't see an on-screen display after several minutes, some of the files are too big — reduce the resolution of the JPEG files to less than 2 mega pixels and burn another disc.
- Total number of files and folders on the disc should be less than 650.
- Some disc may be incompatible due to different recording format or condition of disc.
- When you are using software such as "Easy CD Creator" to burn the jpeg files into the CD-R, ensure that all the selected files have the ".jpg" extensions when copying into the CD layout.
- If the files have ".jpe" or ".jpeg" extensions, please rename them as ".jpg" files.
- File names without ".jpg" extension will not be able to be read by this DVD player. Even though the files are shown as JPEG image files in windows explorer.

Programmed Playback CD VCD2.0 VCD1.1 MP3 WMA

Programmed Playback with Audio CD and MP3/WMA Disc

The Program function enables you to store your favorite tracks from any disc in the player memory.

Program can contain 30 tracks.

1 Press PROGRAM during playback or in the stop mode to enter the Program Edit mode.

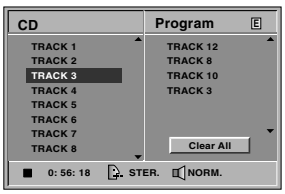
The E mark will appear to the right of the word Program on the right side of the menu screen.

Note

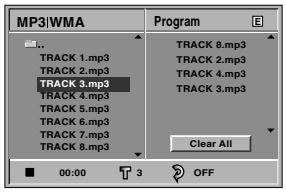
Press PROGRAM to exit the Program Edit mode; the E mark will disappear.

2 Select a track, then press ENTER to place the selected track on the Program list.

3 Repeat step 2 to place additional tracks on the Program list.



Audio CD menu



MP3/WMA menu

4 Press ▶.

The programmed track you selected last is highlighted on the program list.

5 Press ▲/▼ to select the track you want to start playing.

Press TOP MENU to move to the next page.
Press MENU to move to the previous page.

6 Press PLAY to start.

Playback begins in the order in which you programmed the tracks and "PROG." appears on the menu screen. Playback stops after all of the tracks on the Program list have played once.

7 To resume normal playback from programmed playback, select a track of CD (or MP3/WMA) list and then press ENTER.

"PROG." indicator disappears on the menu screen.

Programmed Playback with Video CD

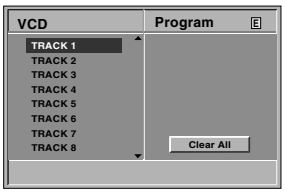
Note

On a Video CD with PBC, you must set PBC to Off on the setup menu to use the Program function. See page 14.

1 Insert Video CD and close the tray.

2 Press PROGRAM while playback is stopped.

The VCD Program menu will appear.



Note

Press RETURN or PROGRAM to exit the Program menu.

3 Follow steps 2-6 of "Programmed Playback with Audio CD and MP3/WMA disc" on left.

4 To resume normal playback from programmed playback, press PROGRAM.

"PROG." indicator disappears in the display window.

Repeat Programmed Tracks

- To repeat the track currently playing, press REPEAT.
  The Repeat icon and "TRACK" appears on the menu screen.
- To repeat all tracks on the program list, press REPEAT a second time.
  The Repeat icon and "ALL" appears on the menu screen.
- To cancel Repeat mode, press REPEAT a third time.
  The Repeat icon and "OFF" appears on the menu screen.

Erasing a Track from Program List

1 Press PROGRAM during playback (Audio CD and MP3/WMA disc only) or in the stop mode to enter the Program Edit mode.
The E mark will appear.
2 Press ▶ to move to the Program list.
3 Use ▲/▼ to select the track that you wish to erase from the Program list.
4 Press CLEAR.
The track will be erased from the Program list.

Erasing the Complete Program List

1 Follow steps 1-2 of "Erasing a Track from Program List" as above.
2 Use ▲/▼ to select "Clear All", then press ENTER.
The complete Program for the disc will be erased.
The programs are also cleared when the disc is removed.

Additional Information

Screen Saver

The screen saver picture appears when you leave the DVD Player in stop mode for about five minutes.
After the Screen Saver has been engaged for about five minutes, the DVD Player will automatically turn itself off.

Dimmer Function

You can adjust the Display Window's brightness in 3 steps. Each press of the FL DIM button modifies the Display Window's brightness in the following order:

Normal → Dim → Display Off → Normal

Video Mode Setting DVD VCD2.0 VCD1.1

- With certain discs, the playback picture may be flickering or Dot Crawl is shown on straight lines. That means Vertical interpolation or De-interlace is not perfectly matched with the disc. In this case, the picture quality may be improved by changing the video mode.
- To change the video mode, press and hold DISPLAY about 3 seconds during disc playback. The new video mode number selected is displayed on the TV screen. Check whether the video quality has improved. If not, repeat the above procedure until picture quality is improved.
- Video mode sequence:
  Auto → Film → Video → Auto
- If you turn off the power, the video mode will return to initial default state (Auto).

Detailed Description of each Video Mode

Auto : The source material of the DVD video (film material or video material) is determined from disc information.

Film : Suitable for playing film based content or video based material recorded by the progressive scan method.

Video : Suitable for playing video based content with comparatively little motion.

Note

The video mode setting only works when the Progressive Scan mode is set to "On" on the setup menu.

Troubleshooting

Check the following guide for the possible cause of a problem before contacting service.

Symptom	Cause	Correction
No power.	● The power cord is disconnected.	● Plug the power cord into the wall outlet securely.
The power is on, but the DVD player does not work.	● No disc is inserted.	● Insert a disc. (Check that the DVD or, audio CD indicator in the display window is lit.)
No picture.	● The TV is not set to receive DVD signal output.	● Select the appropriate video input mode on the TV so the picture from the DVD player appears on the TV screen.
	● The video cable is not connected securely.	● Connect the video cable securely.
	● The connected TV power is turned off.	● Turn on the TV.
No sound.	● The equipment connected with the audio cable is not set to receive DVD signal output.	● Select the correct input mode of the audio receiver so you can listen to the sound from the DVD player.
	● The audio cables are not connected securely.	● Connect the audio cable securely.
	● The power of the equipment connected with the audio cable is turned off.	● Turn on the equipment connected with the audio cable.
	● The Digital Audio Output is set to the wrong position.	● Set the Digital Audio Output to the correct position, then turn on the DVD player again by pressing ON/STANDBY.
The playback picture is poor.	● The disc is dirty.	● Clean the disc.
The DVD player does not start playback.	● No disc is inserted.	● Insert a disc. (Check that the DVD, or audio CD indicator in the DVD display is lit.)
	● An unplayable disc is inserted.	● Insert a playable disc. (Check the disc type, color system, and Regional code.)
	● The disc is placed upside down.	● Place the disc with the playback side down.
	● The disc is not placed within the guide.	● Place the disc on the disc tray correctly inside the guide.
	● The disc is dirty.	● Clean the disc.
	● The Rating level is set.	● Cancel the Rating function or change the rating level.
The remote control does not work properly.	● The remote control is not pointed at the remote sensor of the DVD player.	● Point the remote control at the remote sensor of the DVD player.
	● The remote control is too far from the DVD player.	● Operate the remote control within 23 ft (7 m).
	● There is an obstacle in the path of the remote control and the DVD player.	● Remove the obstacle.
	● The batteries in the remote control are exhausted.	● Replace the batteries with new ones.

Language Code List

Enter the appropriate code number for the initial settings “Disc Audio”, “Disc Subtitle” and/or “Disc Menu” (See page 13).

Code	Language	Code	Language	Code	Language	Code	Language
6566	Abkhazian	7074	Fiji	7678	Lingala	8373	Singhalese
6565	Afar	7073	Finnish	7684	Lithuanian	8375	Slovak
6570	Afrikaans	7082	French	7775	Macedonian	8376	Slovenian
8381	Albanian	7089	Frisian	7771	Malagasy	8379	Somali
6577	Ameharic	7176	Galician	7783	Malay	6983	Spanish
6582	Arabic	7565	Georgian	7776	Malayalam	8385	Sudanese
7289	Armenian	6869	German	7784	Maltese	8387	Swahili
6583	Assamese	6976	Greek	7773	Maori	8386	Swedish
6588	Aymara	7576	Greenlandic	7782	Marathi	8476	Tagalog
6590	Azerbaijani	7178	Guarani	7779	Moldavian	8471	Tajik
6665	Bashkir	7185	Gujarati	7778	Mongolian	8465	Tamil
6985	Basque	7265	Hausa	7865	Nauru	8484	Tatar
6678	Bengali; Bangla	7387	Hebrew	7869	Nepali	8469	Telugu
6890	Bhutani	7273	Hindi	7879	Norwegian	8472	Thai
6672	Bihari	7285	Hungarian	7982	Oriya	6679	Tibetan
6682	Breton	7383	Icelandic	8065	Panjabi	8473	Tigrinya
6671	Bulgarian	7378	Indonesian	8083	Pashto, Pushto	8479	Tonga
7789	Burmese	7365	Interlingua	7065	Persian	8482	Turkish
6669	Byelorussian	7165	Irish	8076	Polish	8475	Turkmen
7577	Cambodian	7384	Italian	8084	Portuguese	8487	Twi
6765	Catalan	7465	Japanese	8185	Quechua	8575	Ukrainian
9072	Chinese	7487	Javanese	8277	Rhaeto-Romance	8582	Urdu
6779	Corsican	7578	Kannada	8279	Rumanian	8590	Uzbek
7282	Croatian	7583	Kashmiri	8285	Russian	8673	Vietnamese
6783	Czech	7575	Kazakh	8377	Samoan	8679	Volapük
6865	Danish	7589	Kirghiz	8365	Sanskrit	6789	Welsh
7876	Dutch	7579	Korean	7168	Scots Gaelic	8779	Wolof
6978	English	7585	Kurdish	8382	Serbian	8872	Xhosa
6979	Esperanto	7679	Laothian	8372	Serbo-Croatian	7473	Yiddish
6984	Estonian	7665	Latin	8378	Shona	8979	Yoruba
7079	Faroese	7686	Latvian, Lettish	8368	Sindhi	9085	Zulu

Area Code List

Enter the appropriate code number for the initial setting “Area Code” (See page 15).

Code	Area
AD	Andorra
AE	United Arab Emirates
AF	Afghanistan
AG	Antigua and Barbuda
AI	Anguilla
AL	Albania
AM	Armenia
AN	Netherlands Antilles
AO	Angola
AQ	Antarctica
AR	Argentina
AS	American Samoa
AT	Austria
AU	Australia
AW	Aruba
AZ	Azerbaidjan
BA	Bosnia-Herzegovina
BB	Barbados
BD	Bangladesh
BE	Belgium
BF	Burkina Faso
BG	Bulgaria
BH	Bahrain
BI	Burundi
BJ	Benin
BM	Bermuda
BN	Brunei Darussalam
BO	Bolivia
BR	Brazil
BS	Bahamas
BT	Bhutan
BV	Bouvet Island
BW	Botswana
BY	Belarus
BZ	Belize
CA	Canada
CC	Cocos (Keeling) Islands
CF	Central African Republic
CG	Congo
CH	Switzerland
CI	Ivory Coast
CK	Cook Islands
CL	Chile
CM	Cameroon
CN	China
CO	Colombia
CR	Costa Rica
CS	Former Czechoslovakia
CU	Cuba
CV	Cape Verde
CX	Christmas Island
CY	Cyprus
CZ	Czech Republic
DE	Germany
DJ	Djibouti
DK	Denmark
DM	Dominica
DO	Dominican Republic
DZ	Algeria
EC	Ecuador
EE	Estonia
EG	Egypt
EH	Western Sahara
ER	Eritrea
ES	Spain
ET	Ethiopia
FI	Finland
FJ	Fiji
FK	Falkland Islands
FM	Micronesia
FO	Faroe Islands
FR	France
FX	France (European Territory)
GA	Gabon
GB	Great Britain
GD	Grenada
GE	Georgia
GF	French Guyana
GH	Ghana
GI	Gibraltar
GL	Greenland
GM	Gambia
GN	Guinea
GP	Guadeloupe (French)
GQ	Equatorial Guinea
GR	Greece
GS	S. Georgia & S. Sandwich Isls.
GT	Guatemala
GU	Guam (USA)
GW	Guinea Bissau
GY	Guyana
HK	Hong Kong
HM	Heard and McDonald Islands
HN	Honduras
HR	Croatia
HT	Haiti
HU	Hungary
ID	Indonesia
IE	Ireland
IL	Israel
IN	India
IO	British Indian Ocean Territory
IQ	Iraq
IR	Iran
IS	Iceland
IT	Italy
JM	Jamaica
JO	Jordan
JP	Japan
KE	Kenya
KG	Kyrgyzstan
KH	Cambodia6
KI	Kiribati
KM	Comoros
KN	Saint Kitts & Nevis Anguilla
KP	North Korea
KR	South Korea
KW	Kuwait
KY	Cayman Islands
KZ	Kazakhstan
LA	Laos
LB	Lebanon
LC	Saint Lucia
LI	Liechtenstein
LK	Sri Lanka
LR	Liberia
LS	Lesotho
LT	Lithuania
LU	Luxembourg
LV	Latvia
LY	Libya
MA	Morocco
MC	Monaco
MD	Moldavia
MG	Madagascar
MH	Marshall Islands
MK	Macedonia
ML	Mali
MM	Myanmar
MN	Mongolia
MO	Macau
MP	Northern Mariana Islands
MQ	Martinique (French)
MR	Mauritania
MS	Montserrat
MT	Malta
MU	Mauritius
MV	Maldives
MW	Malawi
MX	Mexico
MY	Malaysia
MZ	Mozambique
NA	Namibia
NC	New Caledonia (French)
NE	Niger
NF	Norfolk Island
NG	Nigeria
NI	Nicaragua
NL	Netherlands
NO	Norway
NP	Nepal
NR	Nauru
NU	Niue
NZ	New Zealand
OM	Oman
PA	Panama
PE	Peru
PF	Polynesia (French)
PG	Papua New Guinea
PH	Philippines
PK	Pakistan
PL	Poland
PM	Saint Pierre and Miquelon
PN	Pitcairn Island
PR	Puerto Rico
PT	Portugal
PW	Palau
PY	Paraguay
QA	Qatar
RE	Reunion (French)
RO	Romania
RU	Russian Federation
RW	Rwanda
SA	Saudi Arabia
SB	Solomon Islands
SC	Seychelles
SD	Sudan
SE	Sweden
SG	Singapore
SH	Saint Helena
SI	Slovenia
SJ	Svalbard and Jan Mayen Islands
SK	Slovak Republic
SL	Sierra Leone
SM	San Marino
SN	Senegal
SO	Somalia
SR	Suriname
ST	Saint Tome and Principe
SU	Former USSR
SV	El Salvador
SY	Syria
SZ	Swaziland
TC	Turks and Caicos Islands
TD	Chad
TF	French Southern Territories
TG	Togo
TH	Thailand
TJ	Tadjikistan
TK	Tokelau
TM	Turkmenistan
TN	Tunisia
TO	Tonga
TP	East Timor
TR	Turkey
TT	Trinidad and Tobago
TV	Tuvalu
TW	Taiwan
TZ	Tanzania
UA	Ukraine
UG	Uganda
UK	United Kingdom
UM	USA Minor Outlying Islands
US	United States
UY	Uruguay
UZ	Uzbekistan
VA	Vatican City State
VC	Saint Vincent & Grenadines
VE	Venezuela
VG	Virgin Islands (British)
VI	Virgin Islands (USA)
VN	Vietnam
VU	Vanuatu
WF	Wallis and Futuna Islands
WS	Samoa
YE	Yemen
YT	Mayotte
YU	Yugoslavia
ZA	South Africa
ZM	Zambia
ZR	Zaire
ZW	Zimbabwe

Specifications

General

Power requirements	AC 120V, 60 Hz
Power consumption	14W
Dimensions (approx.)	430 X 60 X 242 mm (16.9 x 2.4 x 9.5 inches) (w x h x d)
Mass (approx.)	2.4 kg (5.3 lbs)
Operating temperature	5˚C to 35˚C (41˚F to 95˚F)
Operating humidity	5 % to 90 %

System

Laser	Semiconductor laser, wavelength 650 nm
Signal system	NTSC
Frequency response	DVD (PCM 96 kHz): 8 Hz to 44 kHz DVD (PCM 48 kHz): 8 Hz to 22 kHz CD: 8 Hz to 20 kHz
Signal-to-noise ratio	More than 100dB (ANALOG OUT connectors only)
Harmonic distortion	Less than 0.008%
Dynamic range	More than 100 dB (DVD) More than 95 dB (CD)

Outputs

VIDEO OUT	1 Vp-p 75 Ω, sync negative, RCA jack x 1
S-VIDEO OUT	(Y) 1.0 V (p-p), 75 Ω, negative sync, Mini DIN 4-pin x 1 (C) 0.3 V (p-p) 75 Ω
COMPONENT VIDEO OUT	(Y) 1.0 V (p-p), 75 Ω, negative sync, RCA jack x 1 (Pb)/(Pr) 0.7 V (p-p), 75 Ω, RCA jack x 2
Audio output (digital audio)	0.5 V (p-p), 75 Ω, RCA jack x 1
Audio output (optical audio)	5 V (p-p), 75 Ω, Optical connector x 1
Audio output (analog audio)	2.0 Vrms (1 KHz, 0 dB), 600 Ω, RCA jack (L, R) x 1

Accessory

Video cable 1
Audio cable 1
Remote control 1
Batteries 2

- Design and specifications are subject to change without notice.

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PRODUCTS PURCHASED IN CANADA AND USED IN THE U.S.A. ARE NOT COVERED BY THESE WARRANTIES.

Limited One (1) Year Warranty*

TACP/THI warrants this DVD Player against defects in materials or workmanship for a period of one (1) year after the date of the original retail purchase. DURING THIS PERIOD TACP/THI WILL, AT TACP/THI'S OPTION, REPAIR OR EXCHANGE A DEFECTIVE DVD PLAYER WITH A NEW OR REFURBISHED DVD PLAYER, AT TACP/THI's OPTION. DURING THE INITIAL NINETY (90) DAYS, THIS REPAIR OR EXCHANGE WILL BE WITHOUT CHARGE TO YOU, EXCEPT YOU MUST PAY FOR ALL TRANSPORTATION AND INSURANCE CHARGES FOR THE DVD PLAYER TO BE SHIPPED TO THE DESIGNATED TACP/THI FACILITY. AFTER THE INITIAL NINETY (90) DAYS AND FOR THE REMAINDER OF THE WARRANTY PERIOD, AN ADDITIONAL HANDLING FEE WILL APPLY. YOU MUST DELIVER THE ENTIRE DVD PLAYER AND ALL ACCESSORIES (SUCH AS POWER CORDS, CABLES, AND THE UNIT'S REMOTE CONTROL DEVICE) TO THE DESIGNATED TACP/THI FACILITY, AS INSTRUCTED BY TACP/THI. TACP/THI IS NOT RESPONSIBLE IF YOUR DVD PLAYER IS LOST OR DAMAGED DURING SHIPMENT.

***Commercial Units**

DVD Players sold and used for commercial purposes have a limited ninety (90) day warranty.

Rental Units

The warranty period for rental units begins with the first rental or thirty (30) days from the date of shipment to the rental firm, whichever comes first.

Owner's Manual and Demographic Card

You should read this owner's manual thoroughly before operating this DVD Player. You should complete and mail the enclosed Demographic Card within ten days after you, or the person who has given you this product as a gift, purchased this DVD Player. This is one way to enable TACP/THI to provide you with better customer service and improved products. Failure to return the Demographic Card will not affect your rights under this warranty.

Your Responsibility

THE ABOVE LIMITED WARRANTIES ARE SUBJECT TO THE FOLLOWING CONDITIONS:

(1) You must provide your bill of sale or other proof of purchase. For rental firms, proof of first rental is also required.

(2) The limited warranties from TACP and THI are effective only if the DVD Player is purchased and operated in the U.S.A. or Puerto Rico.

(3) Labor service charges for installation, set up, and adjustment of customer controls are not covered by these limited warranties.

(4) These limited warranties extend only to defects in materials or workmanship as limited above and do not extend to any DVD Player or accessories which have been lost or discarded by you, or to damage to any DVD Player or accessories caused by misuse, accident, Acts of God (such as lightning), or to fluctuations in electric power, improper installation, improper maintenance or use in violation of instructions furnished by TACP/THI; or to units which have been modified or which have had the serial number removed, altered, defaced or rendered illegible.

(5) Physically damaged DVD Players are not acceptable for repair or exchange whether in or out of warranty and will be returned as received.

How to Obtain Warranty Services

If, after following all of the operating instructions in this manual and checking the "Troubleshooting" section, you find that service is needed, call one of the following Customer Solutions Centers to obtain further instructions. Have your proof of purchase and your model and serial numbers available when you call.

For DVD Players purchased in the United States, except Hawaii, call TACP, toll free at **1-866-583-7353.**

For DVD Players purchased in Hawaii, call THI. at **808-591-9281.**

For additional updates, visit TACP's web site: www.toshiba.com/tacp.

LIMITED WARRANTY DVD VIDEO PLAYER (Continued)

LIMITATION OF IMPLIED WARRANTIES

ALL WARRANTIES IMPLIED BY THE LAW OF ANY STATE OF THE U.S.A., INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY LIMITED TO THE DURATION OF THE LIMITED WARRANTIES SET FORTH ABOVE.

LIMITATION OF WARRANTY

WITH THE EXCEPTION OF ANY WARRANTIES IMPLIED BY THE LAW OF ANY STATE OF THE U.S.A. AS HEREBY LIMITED, THE FOREGOING LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES, AGREEMENTS AND SIMILAR OBLIGATIONS OF TACP OR THI WITH RESPECT TO YOUR DVD PLAYER.

EXCLUSION OF DAMAGES

IN NO EVENT SHALL TACP OR THI BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES.

No Change, Modification, or Extension

No person, agent, distributor, dealer or company is authorized to change, modify or extend the terms of these limited warranties in any manner whatsoever.

Time for Taking Action

The time within which action must be commenced to enforce any obligation of TACP or THI arising under this limited warranty or under any law of the United States or of any state thereof is hereby limited to 90 days from the date you discovered, or should have discovered, the defect. This limitation does not apply to implied warranties arising under the law of any state of the U.S.A.

HOW STATE LAW RELATES TO WARRANTY

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE IN THE U.S.A.

SOME STATES OF THE U.S.A. DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, WHEN AN ACTION MAY BE BROUGHT, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU UNDER SUCH CIRCUMSTANCES.

ATTENTION CANADIAN CONSUMERS:

Canadian consumers are requested to complete the special Canadian “Warranty Registration Form” enclosed, and forward this completed form with a copy of bill of sale to TOSHIBA OF CANADA to “Register and Validate” their warranty. Product must be purchased from an Authorized Canadian Dealer. Products purchased in the U.S.A. and used in Canada are not covered by these warranties.

Contact: Toshiba of Canada Limited

Consumer Electronics Group	Consumer Electronics Group	Consumer Electronics Group
191 McNabb Street	22171 Fraserwood Way	1643 North Service Road
Markham, Ontario L3R 8H2	Richmond, B.C. V6W 1J5	Droval, QC H9P 1J1
(905)-470-5400	(604)-303-2500	(514)-856-4100

IMPORTANT: PACKING AND SHIPPING INSTRUCTION

When you send the product to a Service Station, you must use the original carton box and packing material, then insert the original carton box containing the unit into another carton using more packing material.

TOSHIBA

P/NO: 3834RS0054M

Printed in China

PRODUCT SAFETY SERVICING GUIDELINES FOR VIDEO PRODUCTS

CAUTION : DO NOT ATTEMPT TO MODIFY THIS PRODUCT IN ANY WAY, NEVER PERFORM CUSTOMIZED INSTALLATIONS WITHOUT MANUFACTURER'S APPROVAL. UNAUTHORIZED MODIFICATIONS WILL NOT ONLY VOID THE WARRANTY, BUT MAY LEAD TO YOUR BEING LIABLE FOR ANY RESULTING PROPERTY DAMAGE OR USER INJURY.

SERVICE WORK SHOULD BE PERFORMED ONLY AFTER YOU ARE THOROUGHLY FAMILIAR WITH ALL OF THE FOLLOWING SAFETY CHECKS AND SERVICING GUIDELINES. TO DO OTHERWISE, INCREASES THE RISK OF POTENTIAL HAZARDS AND INJURY TO THE USER.

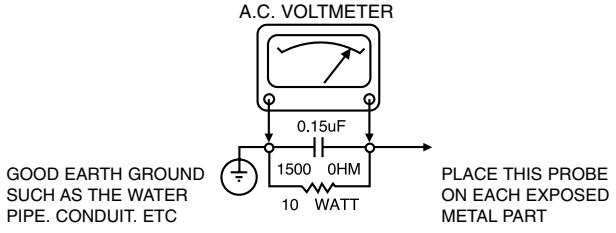
WHILE SERVICING, USE AN ISOLATION TRANSFORMER FOR PROTECTION FROM A.C. LINE SHOCK.

SAFETY CHECKS

AFTER THE ORIGINAL SERVICE PROBLEM HAS BEEN CORRCTED. A CHECK SHOULD BE MADE OF THE FOLLOWING.

SUBJECT : FIRE & SHOCK HAZARD

1. BE SURE THAT ALL COMPONENTS ARE POSITIONED IN SUCH A WAY AS TO AVOID POSSIBILITY OF ADJACENT COMPONENT SHORTS. THIS IS ESPECIALLY IMPORTANT ON THOSE MODULES WHICH ARE TRANSPORTED TO AND FROM THE REPAIR SHOP.
2. NEVER RELEASE A REPAIR UNLESS ALL PROTECTIVE DEVICES SUCH AS INSULATORS, BARRIERS, COVERS, SHIELDS, STRAIN RELIEFS, POWER SUPPLY CORDS, AND OTHER HARDWARE HAVE BEEN REINSTALLED PER ORIGINAL DESIGN. BE SURE THAT THE SAFETY PURPOSE OF THE POLARIZED LINE PLUG HAS NOT BEEN DEFEATED.
3. SOLDERING MUST BE INSPECTED TO DISCOVER POSSIBLE COLD SOLDER JOINTS, SOLDER SPLASHES OR SHARP SOLDER POINTS. BE CERTAIN TO REMOVE ALL LOOSE FOREIGN PARTICLES.
4. CHECK FOR PHYSICAL EVIDENCE OF DAMAGE OR DETERIORATION TO PARTS AND COMPONENTS. FOR FRAYED LEADS, DAMAGED INSULATION (INCLUDING A.C. CORD). AND REPLACE IF NECESSARY FOLLOW ORIGINAL LAYOUT, LEAD LENGTH AND DRESS.
5. NO LEAD OR COMPONENT SHOULD TOUCH A RECIVING TUBE OR A RESISTOR RATED AT 1 WATT OR MORE. LEAD TENSION AROUND PROTRUNING METAL SURFACES MUST BE AVOIDED.
6. ALL CRITICAL COMPONENTS SUCH AS FUSES, FLAMEPROOF RESISTORS, CAPACITORS, ETC. MUST BE REPLACED WITH EXACT FACTORY TYPES, DO NOT USE REPLACEMENT COMPONENTS OTHER THAN THOSE SPECIFIED OR MAKE UNRECOMMENDED CIRCUIT MODIFICATIONS.
7. AFTER RE-ASSEMBLY OF THE SET ALWAYS PERFORM AN A.C. LEAKAGE TEST ON ALL EXPOSED METALLIC PARTS OF THE CABINET, (THE CHANNEL SELECTOR KNOB, ANTENNA TERMINALS. HANDLE AND SCREWS) TO BE SURE THE SET IS SAFE TO OPERATE WITHOUT DANGER OF ELECTRICAL SHOCK. DO NOT USE A LINE ISOLATION TRANSFORMER DURING THIS TEST USE AN A.C. VOLTMETER, HAVING 5000 OHMS PER VOLT OR MORE SENSITIVITY, IN THE FOLLOWING MANNER; CONNECT A 1500 OHM 10 WATT RESISTOR, PARALLELED BY A .15 MFD. 150.V A.C TYPE CAPACITOR BETWEEN A KNOWN GOOD EARTH GROUND (WATER PIPE, CONDUIT, ETC.) AND THE EXPOSED METALLIC PARTS, ONE AT A TIME. MEASURE THE A.C. VOLTAGE ACROSS THE COMBINATION OF 1500 OHM RESISTOR AND .15 MFD CAPACITOR. REVERSE THE A.C. PLUG AND REPEAT A.C. VOLTAGE MEASUREMENTS FOR EACH EXPOSED METALLIC PART. VOLTAGE MEASURED MUST NOT EXCEED 75 VOLTS R.M.S. THIS CORRESPONDS TO 0.5 MILLIAMP A.C ANY VALUE EXCEEDING THIS LIMIT CONSTITUTES A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED IMMEDIATELY.


A.C. VOLTMETER
0.15uF
1500 0HM
10 WATT
GOOD EARTH GROUND SUCH AS THE WATER PIPE. CONDUIT. ETC
PLACE THIS PROBE ON EACH EXPOSED METAL PART

SUBJECT: GRAPHIC SYMBOLS

THE LIGHTNING FLASH WITH APROWHEAD SYMBOL. WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK.

THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF IMPORTANT SAFETY INFORMATION IN SERVICE LITERATURE.

SUBJECT : X-RADIATION

1. BE SURE PROCEDURES AND INSTRUCTIONS TO ALL SERVICE PERSONNEL COVER THE SUBJECT OF X-RADIATION. THE ONLY POTENTIAL SOURCE OF X-RAYS IN CURRENT T.V. RECEIVERS IS THE PICTURE TUBE. HOWEVER, THIS TUBE DOES NOT EMIT X-RAYS WHEN THE HIGH VOLTAGE IS AT THE FACTORY SPECIFIED LEVEL. THE PROPER VALUE IS GIVEN IN THE APPLICABLE SCHEMATIC. OPERATION AT HIGHER VOLTAGES MAY CAUSE A FAILURE OF THE PICTURE TUBE OR HIGH VOLTAGE SUPPLY AND, UNDER CERTAIN CIRCUMSTANCES, MAY PRODUCE RADIATION IN EXCESS OF DESIRABLE LEVELS.
2. ONLY FACTORY SPECIFIED C.R.T. ANODE CONNECTORS MUST BE USED. DEGAUSSING SHIELDS ALSO SERVE AS X-RAY SHIELD IN COLOR SETS, ALWAYS RE-INSTALL THEM.
3. IT IS ESSNTIAL THAT SERVICE PERSONNEL HAVE AVAILABLE AN ACCURATE AND RELIABLE HIGH VOLTAGE METER. THE CALIBRA TION OF THE METER SHOULD BE CHECKED PERIODICALLY AGAINST A REFERENCE STANDARD, SUCH AS THE ONE AVAILABLE AT YOUR DISTRIBUTOR.
4. WHEN THE HIGH VOLTAGE CIRCUITRY IS OPERATING PROPERLY THERE IS NO POSSIBILITY OF AN X-RADIATION PROBLEM. EVERY TIME A COLOR CHASSIS IS SERVICED. THE BRIGHTNESS SHOULD BE RUN UP AND DOWN WHILE MONITORING THE HIGH VOLTAGE WITH A METER TO BE CERTAIN THAT THE HIGH VOLTAGE DOES NOT EXCEED THE SPECIFIED VALUE AND THAT IT IS REGULATING CORRECTLY, WE SUGGEST THAT YOU AND YOUR SERVICE ORGANIZATION REVIEW TEST PROCEDURES SO THAT VOLTAGE REGULATION IS ALWAYS CHECKED AS A STANDARD SERVICING PROCEDURE. AND THAT THE HIGH VOLTAGE READING BE RECORDER ON EACH CUSTOMER'S INVOICE.
5. WHEN TROUBLESHOOTING AND MAKING TEST MEASUREMENTS IN A PRODUCT WITH A PROBLEM OF EXCESSIVE HIGH VOLTAGE, AVOID BEING UNNECESSARILY CLOSE TO THE PICTURE TUBE AND THE HIGH VOLTAGE SUPPLY. DO NOT OPERATE THE PRODUCT LONGER THAN IS NECESSARY TO LOCATE THE CAUSE OF EXCES SIVE VOLTAGE.
6. REFER TO HV. B+ AND SHUTDOWN ADJUSTMENT PROCEDURES DESCRIBED IN THE APPROPRIATE SCHEMATIC AND DIAGRAMS (WHERE USED).

SUBJECT: IMPLOSION

1. ALL DIRECT VIEWED PICTURE TUBES ARE EQUIPPED WITH AN INTE GRAL IMPLOSION PROTECTION SYSTEM, BUT CARE SHOULD BE TAKEN TO AVOID DAMAGE DURING INSTALLATION, AVOID SCRATCHING THE TUBE. IF SCRATCHED REPLACE IT.
2. USE ONLY RECOMMENDED FACTORY REPLACEMENT TUBES.

SUBJECT : TIPS ON PROPER INSTALLATION

1. NEVER INSTALL ANY PRODUCT IN A CLOSED-IN RECESS, CUBBYHOLE OR CLOSELY FITTING SHELF SPACE. OVER OR CLOSE TO HEAT DUCT, OR IN THE PATH OF HEATED AIR FLOW.
2. AVOID CONDITIONS OF HIGH HUMIDITY SUCH AS: OUTDOOR PATIO INSTALLATIONS WHERE DEW IS A FACTOR, NEAR STEAM RADIATORS WHERE STEAM LEAKAGE IS A FACTOR, ETC.
3. AVOID PALCEMENT WHERE DRAPERIES MAY OBSTRUCT REAR VENTING. THE CUSTOMER SHOULD ALSO AVOID THE USE OF DECORATIVE SCARVES OR OTHER COVERINGS WHICH MIGHT OBSTRUCT VENTILATION.
4. WALL AND SHELF MOUNTED INSTALLATIONS USING A COMMERCIAL MOUNTING KIT. MUST FOLLOW THE FACTORY APPROVED MOUNTING INSTRUCTIONS A PRODUCT MOUNTED TO A SHELF OR PLATFORM MUST RETAIN ITS ORIGINAL FEET (OR THE EQUIVALENT THICKNESS IN SPACERS) TO PROVIDE ADEQUATE AIR FLOW ACROSS THE BOTTOM, BOLTS OR SCREWS USED FOR FASTENERS MUST NOT TOUCH ANY PARTS OR WIRING. PERFORM LEAKAGE TEST ON CUSTOMIZED INSTALLATIONS.
5. CAUTION CUSTOMERS AGAINST THE MOUNTING OF A PRODUCT ON SLOPING SHELF OR A TILTED POSITION, UNLESS THE PRODUCT IS PROPERLY SECURED.
6. A PRODUCT ON A ROLL-ABOUT CART SHOULD BE STABLE ON ITS MOUNTING TO THE CART. CAUTION THE CUSTOMER ON THE HAZARDS OF TRYING TO ROLL A CART WITH SMALL CASTERS ACROSS THRESHOLDS OR DEEP PILE CARPETS.
7. CAUTION CUSTOMERS AGAINST THE USE OF A CART OR STAND WHICH HAS NOT BEEN LISTED BY UNDERWRITERS LABORATORIES, INC. FOR USE WITH THEIR SPECIFIC MODEL OF TELEVISION RECEIVER OR GENERICALLY APPROVED FOR USE WITH T.V.'S OF THE SAME OR LARGER SCREEN SIZE.
8. CAUTION CUSTOMERS AGAINST THE USE OF EXTENSION CORDS, EXPLAIN THAT A FOREST OF EXTENSIONS SPROUTING FROM A SINGLE OUTLET CAN LEAD TO DISASTROUS CONSEQUENCES TO HOME AND FAMILY.

SERVICING PRECAUTIONS

CAUTION : Before servicing the DVD covered by this service data and its supplements and addends, read and follow the *SAFETY PRECAUTIONS. NOTE* : if unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions in this publications, always follow the safety precautions.
Remembers Safety First:

General Servicing Precautions

1. Always unplug the DVD AC power cord from the AC power source before:
   (1) Removing or reinstalling any component, circuit board, module, or any other assembly.
   (2) Disconnection or reconnecting any internal electrical plug or other electrical connection.
   (3) Connecting a test substitute in parallel with an electrolytic capacitor.
   Caution : A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.

2. Do not spray chemicals on or near this DVD or any of its assemblies.

3. Unless specified otherwise in this service data, clean electrical contacts by applying an appropriate contact cleaning solution to the contacts with a pipe cleaner, cotton-tipped swab, or comparable soft applicator.
   Unless specified otherwise in this service data, lubrication of contacts is not required.

4. Do not defeat any plug/socket B+ voltage interlocks with whitch instruments covered by this service manual might be equipped.

5. Do not apply AC power to this DVD and/or any of its electrical assemblies unless all solid-state device heat sinks are cerrectly installed.

6. Always connect test instrument ground lead to the appropriate ground before connection the test instrument positive lead. Always remove the test instrument ground lead last.

Insulation Checking Procedure

Disconnect the attachment plug from the AC outlet and turn the power on. Connect an insulation resistance meter(500V) to the blades of the attachment plug. The insulation resistance between each blade of the attachment plug and accessible conductive parts (Note 1) should be more than 1M-ohm.
Note 1 : Accessible Conductive Parts including Metal panels, Input terminals, Earphone jacks, etc.

Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field effect transistors and semiconductor chip components.
The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.

2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.

3. Use only a grouned-tip soldering iron to solder or unsolder ES devices.

4. Use only an anti-static solder removal device. Some solder removal devices not classified a “anti-static” can generate electrical charges sufficient to damage ES devices.

5. Do not use freon-propelled chemicals. These can generate electrical charge sufficient to damage ES devices.

6. Do not remove a replacement ES device from its protec tive package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil, or comparable conductive material).

7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   Caution : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Normally harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)